

5300P Remote Particle Counter

1.2 LPM



The Particles Plus® 5300P Remote Particle Counter measures 0.3 µm to 25.0 µm with a flow rate of 1.2 LPM and is the most versatile remote particle counter available.

The Particles Plus® 5300P Remote Particle Counter is the most feature-advanced remote particle counter available. Integration is easy into a building automation and cleanroom management system via Ethernet, or (optional) Wireless 802.11 b/g, RS485 or RS232. The 5300P remote particle counters display and report 6 user-selectable particle size channels, as well as temperature and relative humidity, flow and sensor status, date of last calibration, serial number, laser on-time and date of manufacture for easy maintenance and warranty management.

This remote particle counter stores up to 45,000 time stamped particle count and environmental data records which provides data redundancy on every instrument. Particles Plus® counters can be controlled and monitored remotely via web browser.

All Particles Plus® counters meet ISO 21501-4 and JIS B9921. The 5300P ensures compliance with an on-board pulse height analyzer.

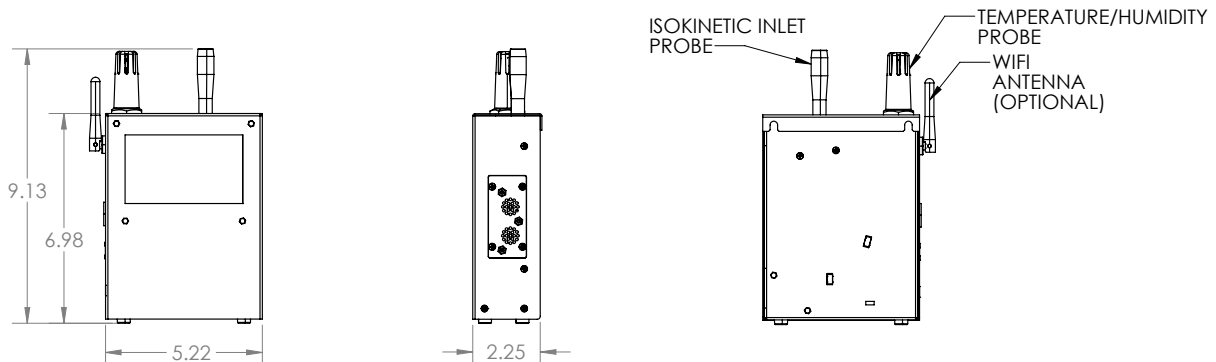
Features and Benefits

- 5300P: Measures 0.3 µm to 25 µm
- 1.2 LPM flow rate
- Long life laser diode technology
- Measures up to 6 channels of simultaneous data
- Approximates mas concentration in µg/m³ with density/refractive index corections
- Large easy-to-use icon driven colour touch screen display
- Temperature and relative humidity probe included
- Stores up to 45,000 sample records, 1,000 sample locations and 50 recipes
- Annotation function allows user to save 32 character notations to a sample record
- Easy configuration and transferable from instrument to instrument
- Connect using Ethernet, USB or (optional) Wireles 802.11b/g, RS485 or RS232
- Static or dynamic IP address (DHCP)
- Remote diagnostics allows for remote service investigation through the internet
- Displays user-definable reports for ISO 14644-1, EU GMP Annex 1 and FS 209E
- Internal audible alarm
- User-selectable channel sizes
- Complies with ISO 21501-4 and JIS B9921 standards
- Easy to clean and wipe down with minimal particle traps
- Seamless integration into a facilitly monitoring system
- Light weight stainless steel enclosure
- 2 year limited waranty. Extended waranties available.

Specifications

| | |
|------------------------------|---|
| Model | 5300P |
| Size Range | 0.3 to 25 µm |
| Size Channels | Factory calibrated at 0.3, 0.5, 1.0, 2.5, 5.0, 10.0 µm variable binning |
| Flow rates | 1.2 LPM |
| Concentration Limits | 27,000,000 particles/ft ³ @ 10% coincidence (per ISO 21501-4), 50,000,000 particles/ft ³ @ 10% coincidence (as tested and validated ¹) |
| Light Source | Long life laser diode |
| Counting Efficiency | 50% @ 0.3 µm; 100% for particles >0.45 µm per JIS |
| Zero Count | <1 count / 60 minutes (<1 particles / 6 ft ³). No fault count subtraction. |
| Count Modes | Automatic, manual, real-time meter, cumulative/differential, mass concentration, count or concentration |
| Count Alarms | 1 to 9,999,999 counts |
| Calibration | NIST traceable |
| Display | 4.3" (10.9 cm) WQVGA (480×272) color touch screen |
| Printer (Optional) | External thermal printer available |
| Vacuum Source | Internal pump with automatic flow control |
| Filtered Exhaust | Internal HEPA filter |
| Number of Channels | 6 |
| Custom Size Channels | Calibration for custom size channels available |
| Audible Alarm | Adjustable built-in alarm |
| Reports | ISO 14644-1, EU GMP Annex 1, FS 209E |
| Recipes | 50 user-configurable recipes |
| Communication Modes | Ethernet and USB |
| Optional Communication Modes | Wireless 802.11 b/g, RS485 or RS232 |
| Environmental Sensor | Includes temperature 32° to 122°F (0° to 50°C) ±1°F (0.5°C) and relative humidity probe 15-90% ±2% |
| Alarm | Alarms on counts for all particle sizes, sensor failure, environmental sensors and flow |
| Standards | ISO 21501-4 and JIS B9921 |
| Calibration | Recommended minimum once per year |
| External Surface | Stainless steel |
| Dimensions (L x W x H) | 5.22" x 2.25" x 9.13" (13.3 cm x 5.7 cm x 23.2 cm) includes barb fittings |
| Weight | 2.6 lb (1.18 kg) |
| Accessories | Operating manual on USB flash drive, isokinetic probe, temperature relative humidity sensor, filter, data download software, USB cable, power supply & cable |
| Optional Accessories | Printed manual, external printer and isokinetic probes |
| Buffer Memory | 45,000 sample records (rotating buffer) including particle count data, environmental data, locations and times. Scrollable on screen or printout |
| Sample Locations | Up to 1,000 locations 20 characters long |
| Sample Time | 1 second to 99 hours |
| Power | 110 to 240 VAC 50/60 Hz universal in-line power supply |
| Operating Conditions | 41° to 104°F (5° to 40°C) / 20% to 95% non-condensing |
| Storage Conditions | 32° to 122°F (0° to 50°C) / Up to 98% non-condensing |
| Warranty | 2 year limited warranty. Extended warranties available. |

1- Validated by independent analysis see paper available at www.particlesplus.com/aac2022_paper



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